

## Earned Value for CFN

The CFN project is using Primavera Project Planner (P3) for developing and measuring the performance measurement baseline. The baseline is structured by WBS and all resources (labor hours, material and contract dollars) are applied at the activity level. The rates in P3 are fully burdened and escalated for each resource to derive the budgeted cost. The timephased budgeted cost and schedule of activities forms the basis for the performance measurement baseline.

The following values will be determined and reported on a monthly basis in P3:

**1. Budgeted Cost of Work Scheduled(BCWS)(PV)** is the monthly timephased budget or planned value derived from P3.

**2. Actual Cost of Work Performed(ACWP)(AV)** is the monthly actual cost that will be input to P3 on a monthly basis and derived from BNL's Peoplesoft Accounting System.

**3. Budgeted Cost of Work Performed(BCWP)(EV)** or Earned Value will be calculated in Primavera at the activity level on a monthly basis using one of the following methods:

1. **Milestone Method** - A predefined set of milestones and their weighted values will be used to determine the percent of the budget to be earned for the month. Some activities earned value will be calculated using 50/50(Half of the budget at the beginning and half when the activity is complete) or 0/100 all the earned value taken upon completion of the activity.
2. **Percent Complete** - The responsible manager will determine a percent of work complete each month which will be applied to the total budget to determine earned value.
3. **Schedule of Values** - This method of calculating Earned Value will be used for the conventional construction work and will be based on the contractor's schedule of values and the associated progress payments. Once the contractor has been selected P3 will be revised to incorporate this earned value method.
4. **Level of Effort** - Earned Value is the budget planned for the month. This method is used for PM and Support services.
5. **Material Purchases** - Earned Value for small material purchases less than \$25,000 will be calculated upon receipt of the material at BNL.

**4. Schedule Variance(SV) and Cost Variance(CV)** will be calculated in P3 on a monthly basis based on the BCWS/ACWP/BCWP values at the third level of the WBS which is the control account level.

**5. ETC - Estimate to complete** will be derived in P3 using current rates and remaining work yet to be completed

**6. EAC - Estimate at Completion** will be derived in P3 adding actuals to date and the ETC to compare the current budget estimate to the original budget.

**7.VAC - Variance at Completion** will be calculated in P3 by subtracting the EAC from the BAC.

**Variance Analysis Reports will be generated on a monthly basis at the third level of the WBS when the cost and schedule variances exceed predefined thresholds. In addition to variance calculations, the Report will include identification of the variances that exceed thresholds, the reason for the variance, and a corrective action plan.**